



Coastal Communications



GULF OF MEXICO AQUATIC MORTALITY NETWORK (GMNET)



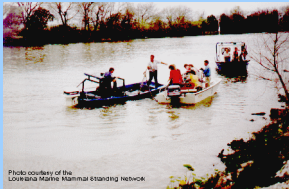
Introduction



Large Fish Kill

The Gulf of Mexico is a large, shallow marine ecosystem that receives runoff from North, Central and South America. A great number and diversity of organisms inhabit the coastal zone, including those with high economic value (fish, shellfish), high public visibility (marine mammals, corals, sea turtles) and important ecological significance (submerged aquatic vegetation, coastal wetlands). Increasing human activities have raised serious questions concerning the continued integrity of the Gulf of Mexico ecosystem. Valued organisms are exposed to debilitating contaminants and oxygen-depleting nutrients in runoff from these vast watersheds. Both flora and fauna are exposed to conditions that can alter their disease resistance or the virulence of disease agents. A variety of shipping and aquaculture activities may also introduce new, exotic parasites and disease agents. Gulf species do not suffer these stresses one at a time, but rather as chronic, multiple assaults on their ability to survive. How well they survive then, is a reflection of the composite stresses they endure and could be used as an indicator of overall ecosystem health. Although the number of aquatic mortalities we can observe and record may represent only a fraction of the total numbers, a standardized monitoring approach used over time across the Gulf of Mexico region will provide information that tells us whether environmental condition is deteriorating or improving.

Gulf of Mexico Aquatic Mortality Network



Fish Kill Monitoring



Marine Mammal Mortality



Tumor Pathologies

Five U. S. states share the northern coast of the Gulf, and each has a program to monitor mortalities of aquatic organisms (fish, shellfish, birds). However, each state has different standards, procedures, and documentation of mortality events. The Gulf of Mexico Aquatic Mortality Network (GMNET) is a federal-state collaboration initiated by ORD's National Health and Environmental Effects Laboratory, that aims to standardize data collection and documentation to provide an integrated, regional database for aquatic mortality and disease. Over time, the database will provide needed information to determine whether environmental conditions for our valued resources are improving or declining. A public site on the worldwide web, linked to the Gulf of Mexico Program's homepage (<http://pelican.gmpo.gov>), informs interested citizens about the purpose of GMNET and provides contacts for reporting events.

Further Information

Contact William Fisher (email fisher.william@epa.gov or tel. 850-934-9394). Visit the GMNET web site at <http://pelican.gmpo.gov/gmnet/>.